

CLAIMS

1. A method for securely communicating to a mobile node on a communications system having a home network for the mobile node and at least one foreign network comprising the steps of:
 - establishing at least one security association between the
 - 5 home network and the foreign network;
 - establishing at least one security association between the mobile node and the foreign network;
 - encrypting information in an information packet to be transmitted from the mobile node to the home network;
 - 10 transmitting the information packet from the mobile node using the security associations to support secure communications from the mobile node;
 - decoding information from the encrypted information packet at the home network to retrieve the information.
2. The method of securely communicating to a mobile node in Claim 1 further comprising the step of:
 - establishing a security association between the home
 - network and a correspondent node.
3. The method of securely communicating to a mobile node in Claim 1 further comprising the step of:
 - establishing a security association between the mobile node
 - and a correspondent node.
4. The method of securely communicating to a mobile node in Claim 3 further comprising the step of:
 - establishing a security association between the home
 - network and a correspondent node.

009790-056560

5. The method of securely communicating to a mobile node in Claim 1 further comprising the step of:
encrypting information using a public key algorithm.
6. The method of securely communicating to a mobile node in Claim 1 further comprising the step of:
encrypting information using a private key algorithm.
7. The method of securely communicating to a mobile node in Claim 1 further comprising the step of:
supporting the secure communication for the security association between the foreign network and the mobile node using a code-based cellular communication system.
8. The method of securely communicating to a mobile node in Claim 1 further comprising the step of:
establishing multiple security associations between a plurality of foreign networks and the home network.
9. The method of securely communicating to a mobile node in Claim 8 further comprising the step of:
establishing a service level agreement to manage the secure communication of information packets on the multiple security associations.
10. The method of securely communicating to a mobile node in Claim 9 further comprising the step of:
establishing a broker to assist in the use of service level agreements on the secure communications system.

11. A method for securely communicating to a mobile node on a communications system having a home network for the mobile node and at least one foreign network comprising the steps of:
- 5 establishing at least one security association between the home network and the mobile node;
- encrypting information in an information packet to be transmitted from the mobile node to the home network;
- transmitting the information packet from the mobile node
- 10 using the security associations to support secure communications from the mobile node;
- decoding information from the encrypted information packet at the home network to retrieve the information.
12. The method of securely communicating to a mobile node in Claim 11 further comprising the step of:
- establishing a security association between the home network and a correspondent node.
13. The method of securely communicating to a mobile node in Claim 11 further comprising the step of:
- the step of a security association between the mobile node and a correspondent node.
14. The method of securely communicating to a mobile node in Claim 13 further comprising the step of:
- establishing a security association between the home network and a correspondent node.

15. The method of securely communicating to a mobile node in Claim 11 further comprising the step of:

encrypting information using a public key algorithm.

16. The method of securely communicating to a mobile node in Claim 11 further comprising the step of:

encrypting information using a private key algorithm.

17. The method of securely communicating to a mobile node in Claim 11 further comprising the step of:

establishing multiple security associations between a plurality of foreign networks and the home network.

18. The method of securely communicating to a mobile node in Claim 17 further comprising the step of:

establishing a service level agreement to manage the secure communication of information packets on the multiple security associations.

19. The method of securely communicating to a mobile node in Claim 18 further comprising the step of:

establishing a broker to assist in the use of service level agreements on the secure communications system.

009590-1356560

5

10

15

a security association between the home network and a correspondent node.

24. The system of securely communicating to a mobile node in Claim 20 further comprising:

a public key encryption means to secure communications.

25. The system of securely communicating to a mobile node in Claim 20 further comprising:

a private key encryption means to secure communications.

26. The system of securely communicating to a mobile node in Claim 20 further comprising:

multiple security associations between a plurality of foreign networks and the home network.

27. The system of securely communicating to a mobile node in Claim 26 further comprising:

a service level agreement to manage the secure communication of information packets on the multiple security associations.

28. The system of securely communicating to a mobile node in Claim 27 further comprising:

a broker to assist in the use of service level agreements on the secure communications system.

5

10

15

a security association between the home network and a correspondent node.

33. The system of securely communicating to a mobile node in Claim 29 further comprising:

a public key encryption means to secure communications.

34. The system of securely communicating to a mobile node in Claim 29 further comprising:

a private key encryption means to secure communications.

35. The system of securely communicating to a mobile node in Claim 29 further comprising:

multiple security associations between a plurality of foreign networks and the home network.

36. The system of securely communicating to a mobile node in Claim 35 further comprising:

a service level agreement to manage the secure communication of information packets on the multiple security associations.

37. The system of securely communicating to a mobile node in Claim 36 further comprising:

a broker to assist in the use of service level agreements on the secure communications system.